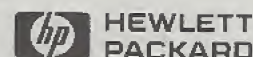# Interface Cables for the HP 7470A, 7475A, and 7550A Graphics Plotters

HEWLETT PACKARD

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Hewlett-Packard graphics plotters, the HP 7470A, 7475A, and 7550A, can be used with a variety of HP and non-HP personal computers and computer systems. However, not all configurations require the same interface cable. This table indicates the proper cable to use with each system, and the schematics for most of the RS-232-C/CCITT V.24 cables are given on the reverse side.

Standalone Configurations:
In a standalone configuration, the plotter is connected to a port by itself. This includes plotter configurations using a personal computer not connected to a mainframe computer.
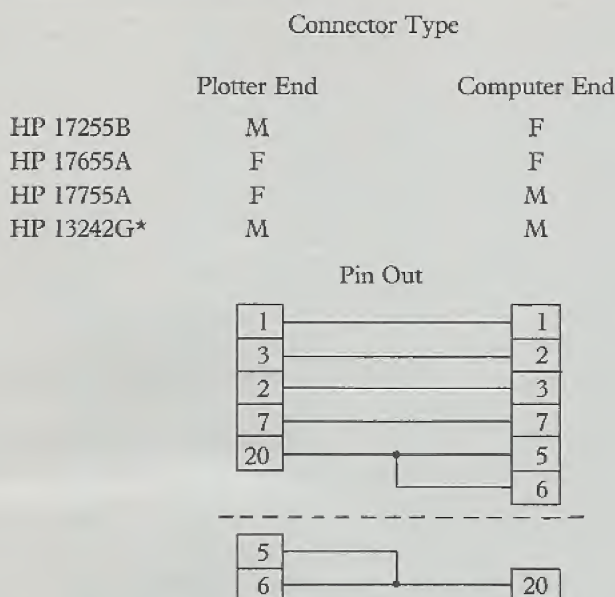
Eavesdrop Configurations:
In an eavesdrop configuration, the plotter is situated between the computer and the terminal, sharing one port with the terminal. To use an HP 7550A in eavesdrop mode, the only cable required in most configurations is the one to the mainframe computer since the HP 7550A has two RS-232-C ports. When connecting an HP 7470A or 7475A in eavesdrop mode, a special eavesdrop cable is required in addition to the cable from the computer.

Note: Cables from non-HP computer manufacturers are listed for information purposes only. Check with the manufacturer for current model numbers and prices.

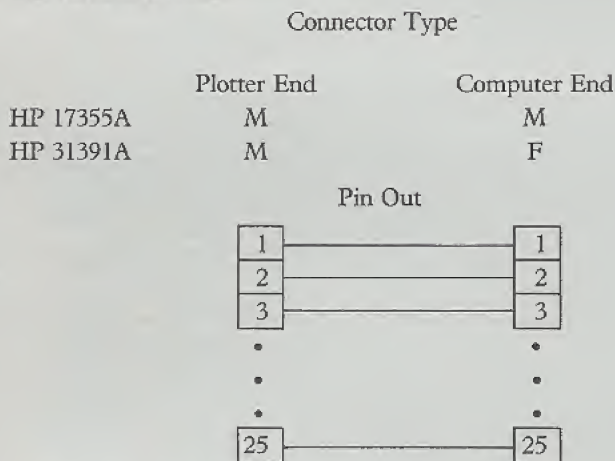| Interface	System	HP 7470A/7475A	HP 7550A
HP-IB (IEEE-488)	HP Series 80 HP Series 100 HP 9000 Series 200 HP 9000 Series 500 HP 1000	HP 45529A/B or HP 10833A/B or HP 31389A/B	HP 45529A/B or HP 10833A/B or HP 31389A/B
RS-232-C CCITT V.24	HP 150 (standalone), TI Pro, Wang PC	HP 13242G	HP 17755A
	HP 150 (terminal mode, plotter in eavesdrop mode)	HP 13242N and HP 17455A	HP 13242N
	HP 110	HP 92221P	
	IBM PC & XT, Compaq	HP 17255B	HP 17655A
	Apple IIe, DEC Rainbow, Osborne	HP 17355A	HP 31391A
	Apple *III*	HP 17355A and Apple A3M0019	HP 31391A and Apple A3M0019
	Apple IIc	Apple A9C0308	
	IBM PC jr	HP 17255B and IBM Serial Device Adapter Cable	HP 17655A and IBM Serial Device Adapter Cable
	HP 3000 (plotter in eavesdrop mode)	HP 17455A and cable from computer	Cable from computer
RS-422-A	HP 3000 Series 64 (plotter in standalone mode)		HP 17855A
HP-IL	HP Series 40 Calculators HP Series 70 Handheld Computers	HP 82167A (HP 7470A only)	

Cable Schematics

Modem Eliminator Type

Connector Type

	Plotter End	Computer End
HP 17255B	M	F
HP 17655A	F	F
HP 17755A	F	M
HP 13242G*	M	M

Pin Out

```
 1 ─────────── 1
 3 ─────────── 2
 2 ─────────── 3
 7 ─────────── 7
20 ──────┬──── 5
         └──── 6
- - - - - - - - - - -
 5 ──────┐
 6 ──────┴──── 20
```

The pins above the dotted line are used in cable designs. If you plan to build a cable for use with drafting plotters, include the additional pins.
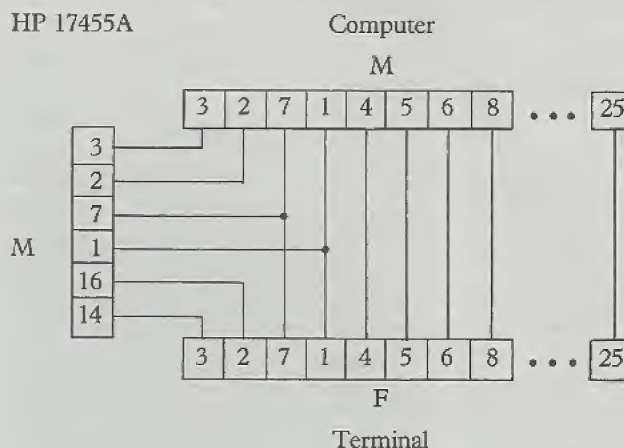
*Other pins are connected in this cable but they do not affect plotter usage.

Straight Through

Connector Type

	Plotter End	Computer End
HP 17355A	M	M
HP 31391A	M	F

Pin Out

```
 1 ─────────── 1
 2 ─────────── 2
 3 ─────────── 3
 ·             ·
 ·             ·
 ·             ·
25 ─────────── 25
```

Pins 1–25 are directly connected.

Y-Cable for Eavesdrop Connection

HP 17455A   Computer

M

```
      ┌─┬─┬─┬─┬─┬─┬─┬─┐     ┌──┐
      │3│2│7│1│4│5│6│8│ ... │25│
  ┌─┐ └─┴─┴─┴─┴─┴─┴─┴─┘     └──┘
  │3│
  ├─┤
  │2│
  ├─┤
  │7│
M ├─┤
  │1│
  ├─┤
  │16│
  ├─┤
  │14│
  └─┘
      ┌─┬─┬─┬─┬─┬─┬─┬─┐     ┌──┐
      │3│2│7│1│4│5│6│8│ ... │25│
      └─┴─┴─┴─┴─┴─┴─┴─┘     └──┘
                F
            Terminal
```

Pins 4, 5, 6 and 8 through 25 are directly connected between the computer and terminal connectors.

Apple IIc, IIe, and *III* are products of Apple Computer, Inc. Compaq is a product of Compaq Computer Corp. DEC Rainbow is a product of Digital Equipment Corp. IBM PC, XT, and PC jr are products of International Business Machines Corp. Osborne is a product of Osborne Computer Corp. TI Pro is a product of Texas Instruments. Wang PC is a product of Wang Laboratories, Inc.